

AMENDMENTS TO THE SPECIFICATION:

Without prejudice, please amend the Specification as follows:

Please replace the Abstract of the Specification with the following paragraph:

--The present invention provides a system and method of particle size and concentration measurement based on providing a focused, synthesized, non-Gaussian laser beam, causing the beam to interact with the particles, measuring the interaction signal and the number of interactions per unit time of the beam with the particles, and using algorithms to map the interaction signals to the particle size and the number of interactions per unit time to the concentration. The particles are fluid borne, airborne, or on a surface and have a size ranging from sub-micron to thousands of microns. In an embodiment of the invention, the focused, synthesized, non-Gaussian laser beam is a dark beam. The measurements can be made using the duration of interaction with a scanning beam, including dark field.--.